

**COMMONWEALTH OF MASSACHUSETTS
DESIGNER SELECTION BOARD PROJECT CRITERIA**

DSB LIST # 08-12 **ITEM #** 1 **DSB PUBLIC NOTICE DATE** July 16, 2008

LAST DATE FOR FILING APPLICATION IS: August 6, 2008 at 2:00 PM

The Board recommends applications to be submitted by any of the following firms:

(<input checked="" type="checkbox"/>)	Architect	()	Engineer
(<input checked="" type="checkbox"/>)	Architect/Engineer (A/E)	()	Other:

PROJECT NUMBER: **WOR0801 ST1**

PROJECT TITLE: **Athletic/Health Science Improvements**

PROJECT LOCATION: **Worcester State College**

AWARDING AGENCY: **DCAM**

APPROPRIATION SOURCE: **College Funds (for study only)**

AVAILABLE AMOUNT: **\$400,000 (for study only)**

ESTIMATED CONSTRUCTION COST: **\$18,000,000/ TBD by study**

TOTAL FEE, excluding reimbursables or any authorized per diem payments, based on scope of work and services authorized if project is completed.

(<input checked="" type="checkbox"/>) Lump Sum Established Set Fee for Study Phase Per M.G.L. C.7, §38G(a)	<u>250,000</u>	dollars
(<input checked="" type="checkbox"/>) Lump Sum Established Set Fee for Final Design Phase Per M.G.L. C.7, §38G(a), based on the approved estimated construction cost in the certified study.	<u>7.2</u>	per cent

IMMEDIATE SERVICES AUTHORIZED:

(☒) CERTIFIABLE BUILDING STUDY

As per M.G.L. C.7, §38I, the selected designer may be appointed by the DCAM Commissioner for continued services as noted below subject to approval by the Designer Selection Board:

(☒) SCHEMATIC PLANS AND OUTLINE SPECIFICATIONS

(☒) DESIGN DEVELOPMENT PLANS AND SPECIFICATIONS

(☒) CONSTRUCTION PLANS AND SPECIFICATIONS

(☒) ADMINISTRATION OF CONSTRUCTION CONTRACT

() OTHER:

MBE/WBE PARTICIPATION:

In accordance with Executive Order #390, DCAM has established minimum goals of 8% MBE participation and 4% WBE participation for the combined value of the study and final design contracts for this project. MBE/WBE goals must be met within the list of requested prime and sub-consultants. All applicants must indicate how they will meet these goals and will be evaluated on that basis. Further information about the MBE/WBE Program appears in the DSB Public Notice at pages 4-8 entitled "Participation by Minority Owned Businesses and Woman Owned Businesses" and at Attachment E of the DCAM Standard Contract for Design Services. Applications from MBE and WBE firms as prime consultant are encouraged.

APPROPRIATION LANGUAGE:

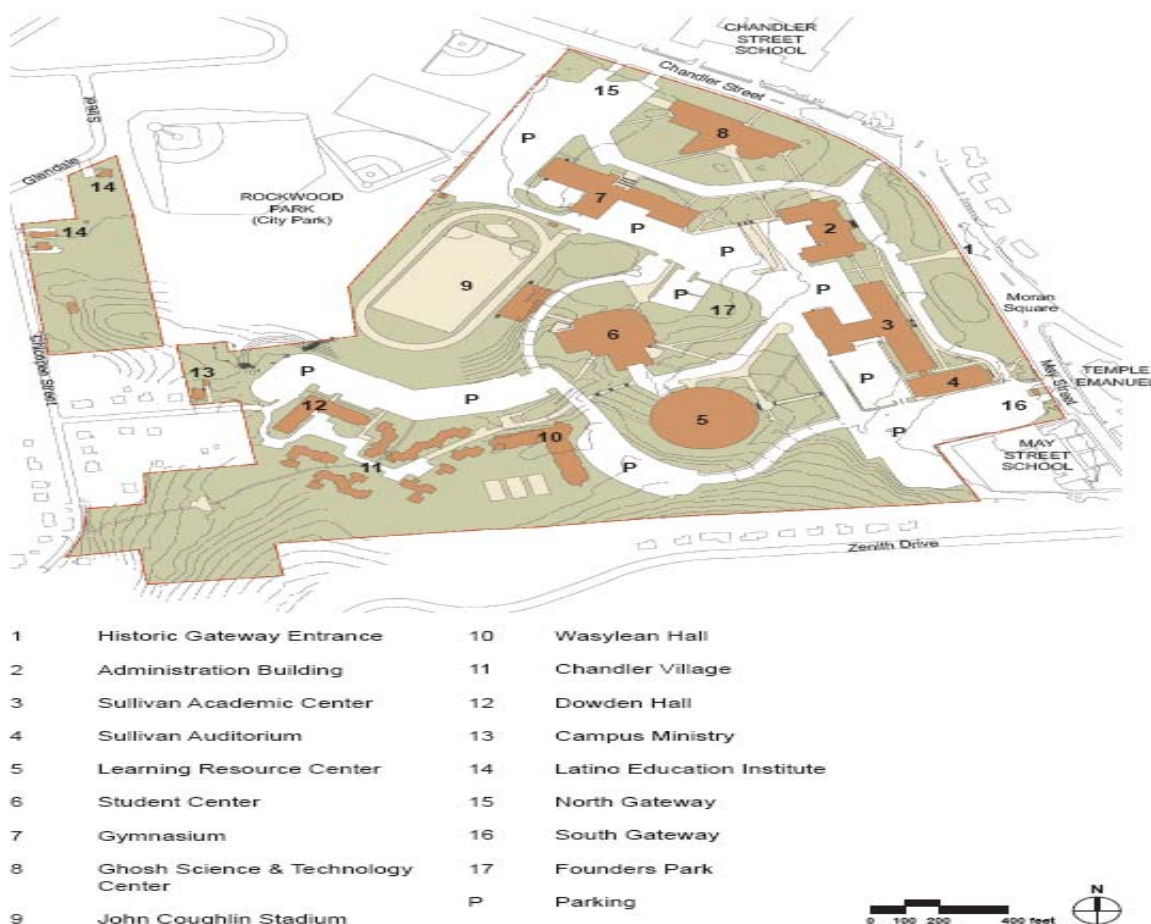
"... for the modernization and improvement of the health science and athletic center at Worcester State College ..."

GENERAL SCOPE OF WORK:

Project Goals

The project will document and analyze athletic and health science space deficiencies in the existing Gymnasium and the Science and Technology Center, recommend the most cost-effective uses for existing capital and operational resources to modernize and improve them, and prepare a building study or studies for priority capital projects for which funding can be secured.

All phases of planning, study and, if the Designer is approved for continued services, design, will implement, and must be in close coordination with, the *Master Plan* completed by Chan Krieger Sieniewicz (CKS) and approved by the College in 2007. At a minimum, this project will “do no harm” to the development goals and framework articulated by the *Master Plan*.



Worcester State College

Background

Worcester State College was founded as a State Normal School (Teacher’s College) in 1874 on the east side of Worcester, and was relocated to farmland on what was then the western edge of the city in 1932. The campus grew from 20 to 56 acres in 1942, and has expanded from a single building (now called the Administration Building) to include seven academic and student life buildings, two dormitories, and a residential “village.” The most recent building projects there were the 110,520 SF Ghosh Science and Technology Center, completed in 2000 and a parking garage (not shown above) that was completed in 2007. The College currently enrolls approximately 3,500 full-time and 2,000 part-time students.

The legacy of Worcester State College’s growth, as summarized by the CKS *Master Plan*, is both positive and negative: the College has become both a home for “architectural innovation and experimentation” and a “fragmented landscape” dominated by automobiles.

The recommendation of the CKS *Master Planning Report* was a new Campus Framework implemented by a realignment of the campus roadway around the campus core and replacement of existing parking and roadways by a new, landscaped

pedestrian campus. The first step in transforming the campus, a *Worcester State College Transportation Analysis* by Howard/Stein-Hudson Associates (HSH) confirming the proposed circulation improvements, has recently been completed. Among other things, the *Transportation Analysis* proposes a detailed implementation plan for the improvements which should be carefully consulted by the designer selected for the study.

The *Master Plan*'s other recommendations for implementing the Campus Framework consist primarily of modernizations of existing buildings, in the course of which it also anticipates that issues of "right-sizing" and instructional quality documented by Rickes Associates *Space Utilization Analysis* (September 2007) for the College will be addressed. In particular, the report recommends that a replacement for the existing Gym "begin seeding the new campus landscape by transforming circulation and parking patterns" (p. 50).



The campus interior, looking northwest towards the Gymnasium Building

The Gymnasium Building

The Gymnasium Building was built in 1959 and originally contained the College's library, cafeteria, and gymnasium. It consists of three two-story elements backed into a slope along a northwest-southeast axis: an 8,700 SF gymnasium over a locker and shower area; an "L" shaped Administration Area over the College Fitness/Wellness Center, boiler room, and storage rooms; and a rectangular Classroom Area with offices above and two-story classrooms in the former library below. The main entrance is on the northeast side at the second level, and opens into a lobby connecting to the office/student service area and the main gymnasium floor. The southeast side of the building is almost entirely surrounded by parking lots. The total size of the building is 65,600 GSF, of which about 40,100 SF is assignable, split evenly between the first and second floors.

Floor plans and a detailed description of the building's systems and condition can be found in a *Preliminary Study Report* prepared by Flansburgh Associates, which also presents a draft program for a new athletic building. The *Preliminary Study* found that the major deficiency of the existing building was the gymnasium wing, which was built to serve the recreational and athletics needs of only 400 students and does not meet NCAA requirements for ceiling height or Title IX requirements for women's athletic programs.

The Ghosh Science and Technology Center

The College's 110,520 GSF Science and Technology Center was completed in 2000. The building contains all the College's biology, chemistry and physics laboratories, its Nursing, Occupational Therapy, Communications Science and Disorders, and Computer Science programs, and its Health Science program staff. It consists of a four-story rectangular main wing containing labs, classrooms and support spaces and a four-story triangular wing with offices along the outside wall and open-plan support space in the center. The third and fourth floors of the main wing are designed with the specialized mechanical systems required by the labs. The York rooftop units in the mechanical penthouse have needed constant repair and are recommended for replacement by the Master Plan.



The Ghosh Science and Technology Center, looking northwest from the Administration Building

Scope of Work

Problem Statement and Preliminary Workplan Approval

This phase of work will include all activities required to complete a draft and final Work Plan for DCAM review and approval. They are anticipated to include, but are not limited to, a tour the buildings and review available studies, plans and documents regarding space, space use, and condition of the Gymnasium and Ghosh Buildings, and meetings with College staff.

Inventory and Analysis

This phase will include all activities and products required to identify the scope of the certifiable study and revise the preliminary Work Plan for DCAM approval. Its focus is anticipated to be on uses currently located in the Gymnasium and the Science and Technology buildings, and its goal will be to identify and analyze deficiencies and recommend operational and capital solutions to address them. The Designer will assist the College and DCAM in reaching strategic operational and capital decisions quickly and efficiently, using existing information and “just enough” additional data, to clarify physical and operational issues and opportunities for planning and budgeting purposes.

The analysis will as far as possible be based on existing data and information, including floor plans furnished by the College and on the Rickes Associates *Space Utilization Analysis*. Additional data gathering will be authorized as an extra service as required. Tasks may include, but are not limited to

- Identification of appropriate space and space utilization standards and benchmarks for DCAM review. The approach should be strategic at the level most appropriate to the type of space, e.g. it is likely that at this stage data for athletic facilities and office space at an institutional level (SF/FTE student or faculty member) and instructional space utilization at the departmental level will be sufficient for decision.
- Identification of surpluses and deficiencies in non-instructional space
- Identification of instructional space utilization issues, including station size and number, class size, and schedule
- Identification of technical issues noted about existing buildings that may influence appropriate uses, e.g. mechanical systems, structural issues, repair costs, re-use potential, etc.
- Development of a range of strategic capital, operational and administrative approaches to space and space utilization issues and deficiencies noted, including recommendations regarding
 - Staffing and section size
 - Scheduling
 - “Right-sizing” existing instructional space
 - Relocation and backfill
 - Renovation
 - New Construction

Implementation issues will be noted, and all options and recommendations will include order of magnitude capital and operating cost estimates and estimates of a project's impact on the College's plans to meet Executive Order 484's goals for energy, water, and greenhouse gas reductions. All capital options will be evaluated in the context of the *Master Plan* recommendations based on funding in the current capital bond bill.

Alternate Solutions

This phase of work will develop and analyze program, siting, and design concept solutions for all elements required to fully implement the preferred capital option identified at the conclusion of the preceding phase, including any renovation and backfill required. Coordination with the College's 484 Energy Plan is required at all stages of analysis for all elements of the project. Tasks should be performed concurrently where appropriate. They are anticipated to include, but are not limited to:

Data gathering

- Obtain all additional information on the existing site and building relevant to the proposed project not obtained in Tasks 1 and 2, including full Chapter 34 Code Review.

Preliminary Program and Cost Analysis

- Hold programming interviews with College staff and prepare an adjacency diagram and tabular program summary with an appropriate net/gross ratio for evaluation of the proposed program.
- Confirm any certifiable funding sources and amounts available for the project with DCAM.
- Prepare preliminary cost analysis for preferred site and program including any necessary recommendations for adjustments required to meet both a "base case" representing the existing appropriation and a "best case" assuming additional certifiable funding, if any.
- Present and review options with the College and DCAM to determine preferred site and program.

Site Selection

- Review *Master Plan* and HSH *Transportation Analysis*.
- Evaluate options for Landscape Design/Site Improvement implementing the *Master Plan*.
- Develop a building footprint/site envelope and siting criteria for the proposed project elements for College and DCAM review.
- Identify and evaluate potential sites for the project(s), noting significant opportunities, constraints, and cost premiums associated with each.
- Present and review siting options to the College and DCAM and identify preferred approach.

Design Concepts

- Develop, evaluate, and present alternative conceptual building and site design approaches.
- Confirm preferred approach with the College and DCAM.
- Present preferred approach to DCAM Global Workshop.

Consensus Solution

This phase includes preparation of a certifiable study package for the preferred concept, including pre-schematic site and building drawings, room data sheets, narrative specifications, cost estimate, implementation plan, and EO 484 energy, greenhouse gas, and water use estimates.

Draft and Final Reports

Preparation of a draft Report fully documenting study process and products for College and DCAM review; revision and delivery of bound and electronic deliverables meeting DCAM standards.

GENERAL CONDITIONS OF THIS CONTRACT:

Study Contract

If selected for study services, the applicant agrees to execute *DCAM Form C-3 Contract for Designer's Services–Study*, or its successor, without revisions or modifications. DCAM compensates the designer during the Study Phase for approved products in accordance with the approved work plan.

Design Contract

At the conclusion of the study, if approved by the DSB to perform final design services, the applicant agrees to execute *DCAM Standard Contract for Design Services* (Revised 12/07)¹ or its successor, without revisions or modifications.

DCAM Procedures

The designer will follow the procedures established in DCAM's Designer Procedures Manual dated June 2005 (http://www.mass.gov/cam/dlforms/DPMD_2005_06.doc). Applicants are urged to review and become familiar with the following supplemental material, which is available on the web at: <http://www.mass.gov/cam/DSB/index.html>.

Construction Specifications

The designer shall utilize the DCAM Standard Specification.

PMAS

Consultants will be required to use DCAM's electronic web-based Project Management and Accounting System (PMAS) as a repository for all project correspondence, documentation, and project budgeting, and scheduling. No special software is required.

Workshops

DCAM and the Designer will hold periodic workshops to ensure that critical issues are not overlooked and that all team members have an opportunity to contribute their expertise, to anticipate potential obstacles, to identify potential solutions, and to expedite the decision-making process. Attendance by key design team members will be required at all workshops.

Executive Order 484

This project shall comply with all applicable requirements of Executive Order 484 (EO 484): see <http://www.mass.gov/Agov3/docs/Executive%20Orders/Leading%20by%20Example%20EO.pdf>. All building studies shall include preliminary estimates of the project's energy use, water use, and greenhouse gas emissions using protocols established by EOEA or as determined by DCAM. No building study shall be certified for final design unless all means, methods, and commitments required to mitigate the project's impact on the operating agency's plan for meeting EO 484's goals are documented in the consensus solution, implementation plan, and estimated construction cost.

LEED Certification

This project shall be certified Mass. LEED Plus as required by Executive Order 484 (see <http://www.mass.gov/Agov3/docs/Executive%20Orders/Leading%20by%20Example%20EO.pdf>) at a level of Silver or higher. Studies for all projects shall identify and evaluate alternate methods, systems, and materials achieving Mass. LEED Plus Silver or higher certification. Any and all of these may be incorporated into Final Design as part of the Designer's base fee; administration of the certification process by the Designer during the Final Design and Construction phases of the project will be considered an extra service.

Universal Design

In addition to complying with 521 CMR, The Rules and Regulations of the Architectural Access Board (http://www.mass.gov/aab/aab_regs.htm), the consultant will review ADA Title II (<http://www.usdoj.gov/crt/ada/reg2.html>), and the ADA Accessibility Guidelines (<http://www.access-board.gov/adaag/html/adaag.htm>), to ensure that the proposed design meets the civil right intent of this act. The requirements of these two laws may differ and the consultant must comply with the more stringent. Design solutions will meet the diverse and changing needs of users across age, ability, language, ethnicity and economic circumstance. DCAM welcomes innovative design strategies that are simultaneously equitable, flexible and legible for all and extend beyond minimal compliance with accessibility regulations.

Environmental and other supplemental services

DCAM reserves the right to obtain supplemental services through independent consultants who will collaborate with the prime and the project team.

Cost Estimating

Cost estimates, cost models, and estimator participation in both the study and the design phases shall meet the requirements of the current DCAM *Cost Estimating Manual* and will be submitted in Unifomat II in the study

¹ The *DCAM Standard Contract for Design Services* (Revised 12/07) replaces the former *DCAM Form C-2 Contract for Designer Services*.

phase and in both Uniformat II to Level 3 and CSI Masterformat in the design phase. The *Cost Estimating Manual* can be found at http://www.mass.gov/cam/dlforms/CEM_Feb06.pdf, and Uniformat II can be found at <http://www.bfrl.nist.gov/oe/publications/nistirs/6389.pdf>.

Building Information Modeling

DCAM encourages use of Building Information Modeling (BIM) in the study, design, and construction phases of its projects, and will authorize development of a building information model as an extra service if the selected Designer has that capability.

Building Commissioning

DCAM will include building commissioning as part of this project. An operations and maintenance plan will be produced as a reimbursable expense during the building commissioning phase. The Designer will meet with DCAM's building commissioning agent during design and construction to evaluate design proposals for MEP systems to ensure maintainability and operational efficiency.

CM at Risk

The construction of this project will be performed utilizing a construction management at-risk (CMAR, sometimes referred to as CM/GC) contract in accordance with MGL Chapter 149A.

ADDITIONAL SUPPORTING DOCUMENTS

For additional materials for the scope of work, refer to documents on file at the Designer Selection Board and available for review in Room 1004 on the 10th floor at One Ashburton Place, Boston.

- *Worcester State College Transportation Analysis*, Howard/Stein-Hudson Associates, June 2008
- *Master Planning for State and Community Colleges: Worcester State College*, Chan Krieger Sieniewicz, August 2007
- *Worcester State College Space Utilization Analysis: Classrooms and Specialized Instructional Spaces*, Rickes Associates, September 2006
- *Worcester State College: Preliminary Study Report, Gymnasium Building*, Flansburgh Associates, 24 January 2003

CONDITIONS FOR APPLICATION:

Current or updated Master File Brochures must be on file with the Board. As a condition of application, each applicant, if selected for the new project, agrees to carry professional liability insurance in an amount equal to the lesser of \$5,000,000 or 10% of the Project's Fixed Limit Construction Cost, but in no event less than \$250,000 per claim in accordance with the *DCAM Standard Contract for Final Design and Contract Administration Services (Revised 11/06)*, (i.e., minimum coverage of \$250,000 up to \$5,000,000 depending on the construction cost). DCAM may seek additional coverage for the selected designer, and if so will bear the cost of the additional coverage.

APPLICATIONS WILL BE EVALUATED BASED ON THE FOLLOWING PRIME AND SUB CONSULTANT PERSONNEL AND EXTENT OF COMPLIANCE WITH MBE/WBE PARTICIPATION GOALS. PLEASE ALSO SEE QUESTION #6 ON DSB APPLICATION 2005.

- | | |
|--------------------------------------|--|
| 1. Architect (as prime) | 7. Structural Engineer |
| 2. Landscape Architect | 8. Specifications Writer (independent consultant required) |
| 3. Mechanical Engineer (MPFP) | 9. Cost Estimator (independent consultant required) |
| 4. Electrical Engineer | 10. LEED Accredited Professional |
| 5. Higher Education Space Programmer | 11. Code Consultant |
| 6. Civil Engineer | |

Where an "independent consultant" is required the Applicant may not provide the services "in house." If the Applicant plans to fulfill any of the other sub-consultant roles, so indicate on the organizational chart. Project Managers for Study and Final Design should be listed separately.

APPLICATIONS WILL BE EVALUATED BASED UPON THE REQUIREMENTS OF M.G.L. Ch. 7 §38F AND WORK LISTED ON DSB APPLICATION 2005 SECTIONS 8, 9 AND 10 WHICH ILLUSTRATES CURRENT QUALIFICATIONS IN THE FOLLOWING AREAS:

- | | |
|--|---|
| 1. Strategic facilities and space planning for higher education | 4. Laboratory facilities programming |
| 2. Planning and design of facilities for health science training | 5. Phased renovation of occupied buildings of a similar size and type |
| 3. Planning and design of athletic facilities for higher education | |

APPLICANTS PLEASE NOTE

A copy of the most current Application Form and Instructions - **DSB 2005 Application Form** is included with this Notice, and is available for download at http://www.mass.gov/cam/forms/fi_dselectboard.html.

Only complete applications submitted on the **DSB2005 Application Form** will be considered by the Designer Selection Board. Applications that are incomplete or submitted on a form other than **DSB2005**, may be rejected as non-compliant and not be considered by the Board.

Applications received at the DSB Office after the advertised deadline will not be considered.